

IN THE CLAIMS:

Please AMEND claim 1, ADD claims 45 and 46, and CANCEL claim 7, without prejudice or disclaimer, in accordance with the following:

1. (CURRENTLY AMENDED) A positive electrode for a lithium-sulfur battery comprising:
 - a current collector having pores comprising at or greater than 60% porosity and less than 90% porosity based on an overall volume of said current collector; and
 - a positive active mass comprising a sulfur-based active material, a conductive agent, and a binder selected from the group consisting of polytetrafluoroethylene (PTFE), a polyvinylidene fluoride (PVDF), a UV-curable vinyl polymer, and a polymethylmethacrylate (PMMA) disposed in the pores of said current collector,wherein the current collector comprises one of a metal foam having the pores and a non-woven fabric coated with a metal to provide the pores.
2. (PREVIOUSLY PRESENTED) The positive electrode of claim 1, wherein the sulfur-based active material is at least one selected from the group consisting of elemental sulfur, solid Li_2S_n ($n \geq 1$), a catholyte in which Li_2S_n ($n \geq 1$) is dissolved, an organosulfur compound, and a carbon-sulfur polymer.
3. (PREVIOUSLY PRESENTED) The positive electrode of claim 1, wherein the pores of said current collector comprise at least 80% and up to, but less than, 90% porosity of an overall volume of said current collector.
4. (PREVIOUSLY PRESENTED) The positive electrode of claim 1, wherein the pores of said current collector comprise at least 80 and up to, but less than, 90% porosity of an overall volume of said current collector.
5. (PREVIOUSLY PRESENTED) The positive electrode of claim 1, wherein said porous current collector comprises the metal foam comprising a resin foam coated with a metal, where the coated resin foam is subjected to a pyrolysis process.
6. (PREVIOUSLY PRESENTED) The positive electrode of claim 5, wherein said porous current collector further comprises a conductive agent other than the metal.

7. (CANCELLED)
8. (ORIGINAL) The positive electrode of claim 1, wherein said porous current collector comprises a carbon fiber.
9. (ORIGINAL) The positive electrode of claim 5, wherein the metal is coated using a coating method that comprises one of electroplating and electroless plating.
10. (ORIGINAL) The positive electrode of claim 7, wherein the metal is coated using a coating method that comprises one of electroplating and electroless plating.
11. (ORIGINAL) The positive electrode of claim 5, wherein the metal is at least one selected from the group consisting of nickel, aluminum, and mixtures thereof.
12. (ORIGINAL) The positive electrode of claim 7, wherein the metal is at least one selected from the group consisting of nickel, aluminum, and mixtures thereof.
- 13-43. (CANCELLED)
44. (PREVIOUSLY PRESENTED) The positive electrode of claim 6, wherein the conductive agent comprises carbon.
45. (NEW) The positive electrode according to claim 1, wherein the conductive agent comprises a carbonaceous material and a conductive polymer selected from the group consisting of polyaniline, polythiophene, polyacetylene, polypyrrole, and mixtures thereof.
46. (NEW) The positive electrode according to claim 1, wherein the binder is selected from the group consisting of polytetrafluoroethylene (PTFE), a polyvinylidene fluoride (PVDF), a UV-curable vinyl polymer, and a polymethylmethacrylate (PMMA).